IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

MASAKAZU USHIJIMA, PLAINTIFF,	§	
V.	§	CAUSE NO. 1:16-CV-585-LY
SAMSUNG ELECTRONICS CO., LTD AND SAMSUNG ELECTRONICS AMERICA, INC., DEFENDANTS.	§	

MEMORANDUM OPINION AND ORDER REGARDING CLAIMS CONSTRUCTION

Before the court are the parties' Joint Claim Construction Statement filed March 1, 2017 (Clerk's Document No. 43); Plaintiff Masakazu Ushijima's and Defendants Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.,'s ("Samsung") Opening Claims Construction Briefs filed March 17, 2017 (Clerk's Document Nos. 46 & 47); and Ushijima's and Samsung's Responsive Claim Construction Briefs filed March 31, 2017 (Clerk's Document Nos. 48 & 49).

The court held a claim-construction hearing on April 27, 2017. *See Markman v. Westview Instruments, Inc.,* 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). After considering United States Patent No. 5,495,405 ("'405 Patent" or "patent in suit") and its prosecution history, the parties' claim-construction briefs, the applicable law regarding claim construction, and arguments of counsel, the court renders its order with regard to claim construction.

I. Introduction

Ushijima asserts claims of infringement of the '405 Patent against Samsung. The '405 Patent generally relates to inverter circuits for powering discharge tubes or lamps.

These parties were previously before the court in a patent-infringement action also commenced by Ushijima, alleging that Samsung's LCD televisions and LCD computer monitors infringed the same patent claim at issue here–Claim 4 of the '405 Patent. *See Ushijima v. Samsung Electronics Co. Ltd*, No. 1:12-CV-318-LY (W.D. Tex. June 2, 2015) ("*Ushijima I*"). In that action, the court rendered a Memorandum Opinion and Order Regarding Claims Construction on January 6, 2014, construing several terms in Claim 4. Now, in this action, Ushijima alleges that Samsung's LCD laptops infringe Claim 4. Samsung proposes constructions for three terms in Claim 4 that the court did not construe in *Ushijima I*. Ushijima contends that there are no additional terms that require construction.

II. Legal Principles of Claim Construction

Determining infringement is a two-step process. *See Markman,* 52 F.3d at 976 ("[There are] two elements of a simple patent case, construing the patent and determining whether infringement occurred . . . ."). First, the meaning and scope of the relevant claims must be ascertained. *Id.* Second, the properly construed claims must be compared to the accused device. *Id.* Step one, claim construction, is the current issue before the court.

The court construes patent claims without the aid of a jury. *See Markman* 52 F.3d at 979. The "words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (quoting *Vitronics Corp v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention. *Id.* at 1313. The person of ordinary skill in the art is deemed to have read the claim term in the context of the entire patent. *Id.* Therefore, to ascertain the meaning of claims, courts

must look to the claims, the specification, and the patent's prosecution history. *Id.* at 1314–17; *Markman*, 52 F.3d at 979.

Claim language guides the court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Other claims, asserted and unasserted, can provide additional instruction because "terms are normally used consistently throughout the patent." *Id.* Differences among claims, such as additional limitations in dependent claims, can provide further guidance. *Id.*

Claims must also be read "in view of the specification, of which they are a part." *Markman*, 52 F.3d at 979. The specification "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Teleflex. Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed.Cir.2002) (internal citations omitted). In the specification, a patentee may define a term to have a meaning that differs from the meaning that the term would otherwise possess. *Phillips*, 415 F.3d at 1316. In such cases, the patentee's lexicography governs. *Id.* The specification may also reveal a patentee's intent to disclaim or disavow the claim's scope. *Id.* Such intentions are dispositive for claim construction. *Id.* Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiment. *Electro Med. Sys., S.A. v. Cooper Life Scis., Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

The prosecution history is another tool to supply the proper context for claim construction because it demonstrates how the inventor understood the invention. *Phillips*, 415 F.3d at 1317. A patentee may also serve as his own lexicographer and define a disputed term in prosecuting a patent.

Home Diagnostics Inc. v. LifeScan, Inc., 381 F.3d 1352, 1356 (Fed. Cir. 2004). Similarly, distinguishing the claimed invention over the prior art during prosecution indicates what the claims do not cover. *Spectrum Int'l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed. Cir. 1988). The doctrine of prosecution disclaimer precludes patentees from recapturing specific meanings that were previously disclaimed during prosecution. *Omega Eng'g Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003). Disclaimers of claim scope must be clear and unambiguous. *Middleton Inc. v. 3M Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002).

Although, "less significant than the intrinsic record in determining the legally operative meaning of claim language," the court may rely on extrinsic evidence to "shed useful light on the relevant art." *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the court in determining the particular meaning of a term in the pertinent field, but "conclusory, unsupported assertions by experts as to the definition of a claim term are not useful." *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.* Extrinsic evidence may be useful when considered in the context of the intrinsic evidence, *Id.* at 1319, but it cannot "alter a claim construction dictated by a proper analysis of the intrinsic evidence," *On-Line Techs., Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1139 (Fed. Cir. 2004).

Indefiniteness

A claim is indefinite if it does not reasonably inform a person of ordinary skill in the art of the claim scope. *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1383–84 (Fed. Cir. 2005). A patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S.Ct. 2120, 2124 (2014). Even if a claim term's definition can be reduced to words or the patentee can articulate a definition supported by the specification, the claim is still indefinite if a person of ordinary skill in the art cannot translate the definition into meaningfully precise claim scope. *Haliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1251 (Fed. Cir. 2008).

III. Discussion

A. '405 terms construed in Ushijima I

Without any additional legal authority or argument, Samsung reurges the positions it took in *Ushijima I* regarding the terms in the '405 Patent that the court previously construed and asks the court to reconsider here the court's construction of those terms. The court finds and concludes that it is unnecessary to reconstrue the terms addressed by the court's claims-construction order in *Ushijima I*.

B. Disputed terms

The parties dispute the construction of three terms. The following table summarizes the parties' proposed constructions of the disputed terms.

Claim Term/Phrase	Ushijima's Proposed Construction	Samsung's Proposed Construction
1. "elongated core" (Claim 4)	Not Indefinite.	Indefinite.
2. "a discharge tube connected across said secondary winding" (Claim 4)	[Does not require construction and should be accorded ordinary and customary meaning.] The added limitation by Samsung is inappropriate. Or, if construed: "a discharge tube connected to a secondary winding such that a first electrical path exists from the first end of the tube to an end of the secondary winding, and a second electrical path exists from the second end of the lamp to the other end of the secondary winding."	"a discharge tube connected across said secondary winding, excluding an intervening series capacitor"
3. "a resonance circuit composed of a parasitic or stray capacitance produced mainly in the close coupling portion of said secondary winding, the loose coupling portion of said secondary winding, and a parasitic or stray capacitance produced in the circumference of said discharge tube" (Claim 4)	[Does not require construction and should be accorded ordinary and customary meaning.] Or, if construed: "a resonance circuit composed of a parasitic or stray capacitance produced mainly in three possible sources: the close coupling portion of said secondary winding, the loose coupling portion of said secondary winding, and a parasitic or stray capacitance produced in the circumference of said discharge tube"	"a resonance circuit composed of: (1) a parasitic or stray capacitance produced mainly in the close coupling portion of said secondary winding, (2) a leakage inductance produced in the loose coupling portion of said secondary winding, and (3) a parasitic or stray capacitance produced in the circumference of said discharge tube"

1. "elongated core"

Samsung contends that this term, appearing in Claim 4, is indefinite because the '405 Patent provides no objective boundaries for this term of degree. Samsung proposes no construction for the term, arguing that due to the indefiniteness of the term, Claim 4 cannot be enforced. Ushijima maintains that the term is readily understood by ordinary persons skilled in the art and the term may be understood by invoking the term's plain ordinary meaning and no construction is necessary. Further, the words and drawings of the '405 Patent demonstrate that "elongated core" can be understood and the term was not stated in a vacuum. Finally, Ushijima argues that based on the examples given and the specification's reference to a "rod-shaped" core along with the drawings of such core for one of the embodiments, reflects that one skilled in the art could determine whether a core is elongated or not.

In *Ushijima I*, the court construed the term "elongated core disposed in substantially a center of said step-up transformer." The court found that Ushijima had disclaimed "EE" and "EI" type transformer cores, but otherwise construed the phrase according to its plain meaning. Now, in this action, Samsung argues that "elongated core," absent objective boundaries in the specification, is indefinite. *See GE Lighting Sols, LLC v. Lights of Am., Inc.*, 663 F. App'x 938 (Fed. Cir. 2016) (decided since *Ushijima I* and holding objective boundaries lacking for term "elongated core" rendered term indefinite). Samsung argues that based on *GE Lighting,* the term "elongated core" used here without any objective boundaries is indefinite.

GE Lighting held that the word "elongated," as used in the patent then before the court, was a term of degree, and that the patent lacked the necessary "objective boundaries" to convey to a person skilled in the art just how "elongated" the claimed "elongated core" must be. 663 Fed. App'x

at 940-41. *GE Lighting* concluded that "elongated core" was indefinite. *Id.* at 941. Samsung argues here, as in *GE Lighting*, the term "elongated" in Claim 4 does not appear in the specification; only a single example of core size is in the specification: "4.8 in diameter and 35 mm in length." Samsung argues that is not enough information to provide the necessary "objective boundaries" for the term "elongated core." Plus, the testimony in the trial in *Ushijima I* from the expert, Mr. Laney, was that Laney's "aspect ratio test" was used for the first time ever and employed a subjective analysis. Laney's testimony in essence was that his aspect ratio test was so simple, it does not need to have appeared anywhere. Samsung argues that if the '405 Patent had objective boundaries, then Ushijima and Laney would not have proposed different tests for assessing whether a core is "elongated."

Ushijima argues that *GE Lighting* is a narrow fact-specific ruling. The issue there was the lack of an objective method to determine the difference between the claimed "elongated core" and cores from the prior art that were also elongated. The delineation would not have been important but for the fact that in the prior art the patentee had told the USPTO that the "elongated prior art cores were not elongated." Here in the '405 Patent, a person skilled in the art can tell an elongated core from one that is not. The '405 Patent also explains that the core required is long enough to allow the adjacent placement on the core of the entire primary winding, as well as the close and loose coupled portion of the secondary windings. Ushijima again argues that in *Ushijima I* Samsung told the court that "elongated core" could be reasonably defined and proposed a definition. Ushijima proposed another alternate definition, and the court rejected both, concluding that the term did not require a definition.

Initially, the court observes that in *GE Lighting* transformer cores were not at issue. Additionally, what the court finds distinguishable between the claim construction of "elongated core" in this action and that in *GE Lighting*, is that in *GE Lighting* additional information–a measure of degree–was required to differentiate an "elongated" core from other cores. That issue is not present in this action. There is no body of law–nor can there be–that establishes precedent for defining terms. The law does not create a dictionary. One cannot move from one patent to another with the same term. The court concludes that "elongated core" as used in Claim 4 in this action does not require objective measures, that the term is readily understood by ordinary persons skilled in the art, the term may be understood by invoking the term's plain ordinary meaning, and no construction is necessary.

2. "A discharge tube connected across said secondary winding"

Samsung argues that throughout the *Ushijima I* litigation, Ushijima maintained that his patent did not cover an inverter with a series or ballast capacitor between the secondary winding of the transformer and the discharge tube. Now, however, Ushijima is accusing Samsung LCD laptops, which each has a series capacitor, of infringing the '405 Patent. Samsung argues that the prior art section of the '405 Patent discusses ballast capacitors and that thereafter in the patent, one of the goals of the '405 Patent was to omit a ballast capacitor in favor of "an extreme leakage flux type" transformer. Samsung argues that Ushijima previously and repeatedly disavowed a series capacitor from the scope of the patent, and therefore Samsung's proposed construction, which recites that an intervening series capacitor is excluded, is proper. *See Thorner v. Sony Computer Entm't Am. LLC*, 669 F.2d 1362, 1367 (Fed. Cir. 2012) (disclaimer in patent must be clear and unmistakable). Finally, Samsung argues that Ushijima first proposed no construction at all for this clause, but then presents the court with a proposed construction that is inconsistent with the clause's plain meaning.

Ushijima argues that no construction is necessary. Further, Ushijima argues that Samsung's proposed construction adds a limitation that is improper. Ushijima contends that nowhere in the '405 Patent is there any requirement that any series or ballast capacitor be eliminated. Ushijima contends that Samsung ignores the intrinsic evidence and the plain meaning of the claim and relies on only extrinsic evidence–arguments and representations made by Ushijima or his attorneys during the proceedings in *Ushijima I*. Ushijima argues that nowhere is there a clear and unmistakable disclaimer in the '405 Patent.

The court agrees with Ushijima and finds no language in the '405 Patent that amounts to a clear and unmistakable disclaimer related to "excluding an intervening series capacitor." The court finds no construction of this phrase is necessary nor is Samsung's proposed additional exclusion language, "excluding an intervening series capacitor." The phrase is readily understood by ordinary persons skilled in the art and the phrase may be understood by invoking the phrase's plain ordinary meaning.

3. "A resonance circuit composed of a parasitic or stray capacitance produced mainly in the close coupling portion of said secondary winding, the loose coupling portion of said secondary winding, and a parasitic or stray capacitance produced in the circumference of said discharge tube."

In *Ushijima I* Samsung asked the court to construe "composed of," which is contained within this phrase in Claim 4, as "including only." Ushijima disagreed with that proposal, argued the phrase needed no construction, but if it did, it should be defined by the court as "consisting essentially of." The court construed the phrase to have its plain and ordinary meaning as an opening transition phrase.

Ushijima argues that now Samsung has simply taken an expanded portion of Claim 4 that contains the "composed of" clause, and is asking the court to construe the broader phrase in a manner that ultimately defines "composed of" in such a way at to mean "including only." Ushijima argues

that this is improper. Further, Ushijima argues that Samsung's definition would require that in all instances, the parasitic or stray capacitance be produced mainly in the close-coupling portion of the secondary winding. Ushijima argues there is nothing in the '405 Patent to support a further limit to Claim 4 to only the embodiments where the parasitic capacitance is produced mainly in the close coupled portion. Ushijima argues nowhere in the patent specification is the word "mainly" used to suggest that the close coupling portion is the main source of parasitic capacitance. As for extrinsic evidence, Richard Flasck testified as an expert in *Ushijima I* about the meaning of the phrase. Flasck's impressions are consistent with Ushijima's position.

The court finds that as in *Ushijima I*, here no construction is required. The phrase is readily understood by ordinary persons skilled in the art and the phrase may be understood by invoking the phrase's plain ordinary meaning.

C. Summary table of adopted agreed and disputed terms

Claim Term/Phrase	Court's Construction
"elongated core" (Claim 4)	**[plain and ordinary meaning, not indefinite]**
"a discharge tube connected across said secondary winding" (Claim 4)	**[plain and ordinary meaning]**
"a resonance circuit composed of a parasitic or stray capacitance produced mainly in the close coupling portion of said secondary winding, the loose coupling portion of said secondary winding, and a parasitic or stray capacitance produced in the circumference of said discharge tube" (Claim 4)	**[plain and ordinary meaning, not indefinite]**

"a primary winding" (Claim 4)	**the winding of a transformer which is on the input side**
"a secondary winding" (Claim 4)	**the winding of a transformer which is on the output side**
"in order to" (Claim 4)	**sufficient to**
"An inverter circuit for a discharge tube" (Claim 4)	**[not limiting]**
"a leakage flux type step-up transformer" (Claim 4)	**a step-up transformer with a portion of the secondary winding having leakage flux sufficient to serve as the inductive component of a resonance circuit**
"an elongated core disposed in substantially a center of said step-up transformer" (Claim 4)	**an elongated core, exclusive of an EE or EI type core, disposed in substantially a center of said step-up transformer**
"magnetically close couples with said primary winding" (Claim 4)	**magnetically interacts with the primary winding to serve mainly as a normal secondary winding to effect step-up operation**
"magnetically loose couples with said primary winding" (Claim 4)	**magnetically interacts with the primary winding to serve mainly as the inductive component of a resonance circuit**
"composed of" (Claim 4)	**[plain and ordinary meaning, open transition]**

"the inverter circuit according to Claim 4, further including a capacitor connected in parallel with said discharge tube." (Claim 5)	**[plain and ordinary meaning, not indefinite]**

IV. Conclusion

For the above reasons, the court construes the disputed claims as noted and so **ORDERS**. No further claim terms require construction.

IT IS FURTHER ORDERED that this cause is set for a Scheduling Conference on September 29, 2017, at 2:00 p.m., in Courtroom 7, Seventh Floor, United States Courthouse, 501 W. 5th Street, Austin, Texas 78701. The parties shall meet and confer in advance of that date in an attempt to settle this case. If the case is not settled, the parties shall confer in an attempt to reach agreement on a schedule to follow for the remainder of this case. The court will render a Scheduling Order as a result of the September 29 conference.

SIGNED this 14th day of August, 2017.

LEE YEAKEL
UNITED STATES DISTRICT JUDGE